

Atty Dkt. No.: CLON-028
USSN: 09/976,673

REMARKS

In view of the following remarks, the Examiner is requested to withdraw the rejections and allow Claims 1-12 and 18-19, the only claims pending and currently under examination in this application, Claims 13 to 17 having been withdrawn from further consideration.

Claim 1 has been amended to the limit the proteins to "far-red" shifted proteins, support for this amendment being found in the specification at, among other locations, page 6, line 25 and page 16, lines 21 to 32, as well as the working exemplification which reports representative specific far red shifted proteins according to the subject invention. Support for the amendment to Claim 3 is found in the specification at page 16, line 27. Support for the amendment to Claim 5 is found in the specification at page 17, lines 28-32. The amendments to the remaining claims are either analogous to these amendments and/or clarify claim language. As the above amendments introduce no new matter to the application, their entry by the Examiner is respectfully requested.

It is noted that the above amendments have been made solely in order to expedite allowance of the present application, and should in no way be construed as an acquiescence by the Applicants with the Office with respect to any rejection appearing in the Office Action. The Applicants expressly reserve the right to pursue the claims of their original scope and format in a continuation application.

An objection under 35 C.F.R. § 1.75(c) has been raised against Claims 10-12 and 18-19. In view of the above amendments to these claims, this rejection may be withdrawn.

Claims 7-9 have been rejected under 35 U.S.C. § 112, first ¶ for the asserted reason that these claims fail to comply with the written description requirement, e.g., as the claims are directed to fragments. In view of the above amendments to Claims 7 to 9,

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it is believed that this rejection may be withdrawn.

Claims 8-9 have been rejected under 35 U.S.C. § 112, first ¶ for an asserted lack of enablement, based on an asserted insufficient description of the term "stringent" in the specification. However, the specification clearly defines the term stringent. See e.g., page 8, lines 19-31 which read:

Also provided are nucleic acids that hybridize to the above described nucleic acids under stringent conditions. An example of stringent hybridization conditions is hybridization at 50°C or higher and 0.1×SSC (15 mM sodium chloride/1.5 mM sodium citrate). Another example of stringent hybridization conditions is overnight incubation at 42°C in a solution: 50 % formamide, 5 × SSC (150 mM NaCl, 15 mM trisodium citrate), 50 mM sodium phosphate (pH7.6), 5 × Denhardt's solution, 10% dextran sulfate, and 20 µg/ml denatured, sheared salmon sperm DNA, followed by washing the filters in 0.1 × SSC at about 65°C. Stringent hybridization conditions are hybridization conditions that are at least as stringent as the above representative conditions, where conditions are considered to be at least as stringent if they are at least about 80% as stringent, typically at least about 90% as stringent as the above specific stringent conditions. Other stringent hybridization conditions are known in the art and may also be employed to identify nucleic acids of this particular embodiment of the invention.

As such, it is respectfully submitted that the specification does provide sufficient guidance as to the term "stringent," and therefore that this rejection may be withdrawn.

Claim 5 has been rejected under 35 U.S.C. § 112, second ¶. In view of the above amendment to Claim 5, this rejection may be withdrawn.

Claims 1, 3 and 5-7 have been rejected under 35 U.S.C. § 101 for assertedly reading on a product of nature because the claims do not recite the phrase "isolated and purified." The Applicants respectfully point out that the claims include the phrase "present in other than its natural environment." This phrase is defined in the

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specification, see page 8, lines 1 to 5, and clearly distinguishes the claimed compositions such that they do not read on a product of nature. As such, this rejection may be withdrawn.

Finally, Claims 1-9 have been rejected under 35 U.S.C. § 102(e) over Tsien et al., U.S. Patent No. 6,342,379. The Applicants point out that the claims are limited to nucleic acids that have at least one of the following features:

- (i) a nucleic acid that encodes a far red shifted Stichodactylidaen chromoprotein or fluorescent mutant thereof;
- (ii) a nucleic acid that encodes fluorescent protein having an emission maximum ranging from about 620 to 680 nm; and
- (iii) a nucleic acid having a sequence of similarity of at least about 80% with a nucleotide sequence chosen from SEQ ID NOS: 01, 03, 05, 07, 09, 11, 13, 15, 17, 19, 23, 25 and 27.

A review of Tsien has not found any nucleic acids having at least one of these elements. As such, this rejection may be withdrawn.

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CONCLUSION

In view of the above remarks, this application is considered to be in good and proper form for allowance and the Examiner is respectfully requested to pass this application to issuance.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-0815.

Respectfully submitted,

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